

Abstract

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- 1.1 Process for fabricating active and passive, polymer-based components for use in integrated optics.
- 2.1 The object of the process according to the present invention is to fabricate active and passive optoelectronic components of a high quality, and having a high level of integration and high packing density.
- 2.2 According to the present invention, a patternable polymer resist layer of a high quality is deposited onto an optoelectronic component. An etching mask is used in conjunction with a high-grade anisotropic deep etching to produce a pattern which is filled with monomers through gas-phase or liquid-phase diffusion. The optical properties of the optical component can be selectively changed as a function of the type of monomers used for the diffusion, as well as of the temperature and application time.
- 2.3 The process according to the present invention makes it possible to increase the packing density of future integrated monomode optics and simultaneously produce large quantities in a cost-effective manner.

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Fig. 1